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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,580	12/21/2001	Sunil K. Gupta	29250-000550	1242

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HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

VO, HUYEN X

ART UNIT PAPER NUMBER

2655

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/027,580	<b>Applicant(s)</b> GUPTA, SUNIL K.	
	<b>Examiner</b> Huyen Vo	<b>Art Unit</b> 2655	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.  
2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant has submitted an amendment filed 2/15/2005 arguing to traverse the art rejection based on limitations regarding *"dynamically updating the stored recognition vocabulary for subsequent received utterances based on said comparison"* and *"receiving an utterance from a user that is designated to replace at least one of the preset voice-activated commands in the stored recognition memory"*(see amendment pages 6-8). Applicant's arguments have been considered but are not persuasive. Zuberec et al. (US 6298324) teach the step of updating a previous list of active recognition vocabularies by registering a new set of active vocabularies in the memory accessibly by the speech recognizer (see Zuberec et al. for details). Applicant is advised to clearly define the step updating and specifically point out that the updating is an updating of acoustic models of the speech recognition vocabularies. Also, Lewis et al. (US 6577999) teach the step of replacing an acoustic model of using a newly entered acoustic model (*col. 6, line 1-5, particularity*). Therefore, previous grounds of rejection are maintained.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of

an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (US Patent No. 6577999).

4. Regarding claim 19, Lewis et al. disclose a method of customizing a recognition vocabulary on a device having a current vocabulary of preset voice-activated commands, comprising: receiving an utterance from a user that is designated to replace at least one of the preset voice-activated commands in the stored recognition memory (*col. 6, ln. 23-67*); and dynamically updating the recognition vocabulary with the received utterance (*col. 6, ln. 23-67*).

5. Regarding claim 20, Lewis et al. further disclose a method of claim 19, the user implementing a speaker-training feature on the device in order to dynamically update the recognition vocabulary (*col. 4, ln. 38 to col. 5, ln. 47*).

6. Regarding claim 21, Lewis et al. further disclose a method of claim 19, wherein the received utterance replaces a voice-activated command that is difficult for the device to recognize when input by the user, so as to enhance the usability of the device (*col. 6, ln. 23-67, replace the less reliable command*).

7. Claims 1-4, 7-10, and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Zuberec et al. (US Patent No. 6298324).

8. Regarding claim 1, Zuberec et al. disclose a method of recognizing speech so as to modify a currently active vocabulary, comprising:

receiving an utterance (*col. 5, ln. 4-11*);

comparing said received utterance to a stored recognition vocabulary representing a currently active vocabulary (*col. 5, ln. 4-11*); and

dynamically updating the stored recognition vocabulary for subsequent received utterances based on said comparison (*col. 5, ln. 26-47 or referring to col. 9, ln. 1 to col. 10, ln. 67*).

9. Regarding claim 8, Zuberec et al. disclose a speech recognition system, comprising:

a client device receiving an utterance from a user (*element 156 in figure 6*); and

a server in communication with the client device (*col. 7, ln. 1-14*), the client device comparing the received utterance to a stored recognition vocabulary representing a currently active vocabulary (*col. 5, ln. 4-11*), recognizing the received utterance and dynamically updating the stored recognition vocabulary for subsequent received utterances (*col. 5, ln. 26-47 or referring to col. 9, ln. 1 to col. 10, ln. 67*).

10. Regarding claims 2 and 9, Zuberec et al. further disclose a method and system of claims 1 and 8, the received utterance being received in a voice dialog from a user (*col. 5, ln. 4-11*), the step of dynamically updating the stored recognition vocabulary

being based on a current state of user interaction in the voice dialog and on a recognition result (*col. 9, ln. 1 to col. 10, ln. 67*).

11. Regarding claims 3 and 10, Zuberec et al. further disclose a method and system of claims 1 and 8, wherein said step of dynamically updating the recognition vocabulary including running an application to update the stored recognition vocabulary (*col. 4, ln. 58 to col. 5, ln. 47*).

12. Regarding claim 4, Zuberec et al. further disclose a method of claim 3, wherein said application being an application run by a client device (*col. 4, ln. 58 to col. 5, ln. 47 or Application 42 in figure 3*).

13. Regarding claim 7, Zuberec et al. further disclose a method of claim 1, wherein said step of comparing including comparing a speech template representing said received utterance to said stored recognition vocabulary (*col. 5, ln. 4-11*).

14. Regarding claims 14-15, Zuberec et al. further disclose a system of claim 8, the client device further including a processor for comparing a speech template representing said received utterance to said stored recognition vocabulary to obtain a recognition result (*col. 7, ln. 29-67 and refer to figure 5*), wherein the processor controls the client application to update the stored recognition vocabulary (*col. 7, ln. 29-67 and*

Art Unit: 2655

*refer to figure 5), wherein said processor being a microprocessor-driven speech recognition engine (col. 7, ln. 29-67 and refer to figure 5).*

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zuberec et al. (US Patent No. 6298324).

17. Regarding claim 5, Zuberec et al. fail to specifically disclose that the application is a web-based application having multiple pages, said stored recognition vocabulary being dynamically updated as a user navigates between different pages. However, Zuberec et al. disclose *"the computer device 150 is representative of many diverse products. Examples of representative products include pagers, cellular phones, ... computers such as desktop computers, laptop computers, handheld computers, and other types of computer-based products"* (col. 8, ln. 28-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the "operation of grammar help command" in computer-related service such as web browsing. The advantage of doing this is to enhance speech recognition accuracy.

18. Regarding claim 6, Zuberec et al. do not disclose a method of claim 1, wherein said step of receiving including extracting only information in said received utterance necessary for recognition. However, the examiner takes official notice that feature extraction must be performed on the received speech command before comparing with the templates. The advantage of the feature extraction is to enable the speech recognition system to enhance the speech recognition accuracy.

19. Claims 11-12 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zuberec et al. (US Patent No. 6298324) in view of Hashimoto et al. (US Patent No. 5632002).

20. Regarding claims 11-12 and 17, Zuberec et al. fail to disclose the system of claims 8 and 10, the server further including a vocabulary builder application which dynamically updates the stored recognition vocabulary by sending data to the client application, wherein said vocabulary builder application sending individual vocabulary elements to the client device for augmenting the currently active vocabulary; and wherein if the application is run on the server, the recognition vocabulary update is sent from server to client device via a communication path. However, Hashimoto et al. teach that the server further including a vocabulary builder application which dynamically updates the stored recognition vocabulary by sending data to the client application (*col. 15, ln. 8 to col. 17, ln. 45 or referring to figure 15*), wherein said vocabulary builder



application sending individual vocabulary elements to the client device for augmenting the currently active vocabulary (*col. 15, ln. 8 to col. 17, ln. 45 or referring to figure 15*); and wherein if the application is run on the server, the recognition vocabulary update is sent from server to client device via a communication path (*col. 15, ln. 8 to col. 17, ln. 45 or referring to figure 15*).

Since Zuberec et al. and Hashimoto et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Zuberec et al. by incorporating the teaching of Hashimoto et al. in order to distribute the load from the client device and reduce processing power for the client device.

21. Regarding claim 16, Zuberec et al. disclose a system of claim 8, wherein the update to the stored recognition vocabulary is stored on the client device (*vocabulary 44-46 in figure 6*), but not on the server. However, Hashimoto et al. teach that the update to the stored recognition vocabulary is stored on the server (*col. 15, ln. 8 to col. 17, ln. 45 or referring to figure 15*).

Since Zuberec et al. and Hashimoto et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Zuberec et al. by incorporating the teaching of Hashimoto et al. in order to distribute the load from the client device and reduce processing power for the client device.

Art Unit: 2655

22. Regarding claim 18, the modified Zuberec et al. do not disclose a system of claim 17, said communication path being embodied as any one of a simultaneous voice data (SVD) connection, wireless data connection, wireless channels, ISDN connections, or PPP dial-up connections. However, Hashimoto et al. further teach the communication path being wireless (*figures 4-6, communication between SR module and the Application Program module is either wired/wireless*).

Since the modified Zuberec et al. and Hashimoto et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Zuberec et al. by incorporating the teaching of Hashimoto et al. in order to enable users at a remote location to access quality speech recognition services.

23. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zuberec et al. (US Patent No. 6298324) in view of Scruggs et al. (US Patent No. 5732187).

1. Regarding claim 13, Zuberec et al. fail to disclose a system of claim 8, the server further including a database storing client-specific data that is updatable by the client device. However, Scruggs et al. teach a database storing client-specific data that is updatable by the client device (*col. 4, ln. 58-67*).

Since Zuberec et al. and Scruggs et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at

Art Unit: 2655

the time of invention to modify Zuberec et al. by incorporating the teaching of Scruggs et al. in order to enhance speech recognition accuracy.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Art Unit: 2655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HXV

May 3, 2005

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SUSAN MCFADDEN  
PRIMARY EXAMINER